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ABSTRACT

This booklet opens with a list of the features that society now demands from higher education and then describes approaches to assessing the community college mission. Twenty-first century expectations for higher education are being shaped by: (1) a change in focus from teaching to learning; (2) the need to base credentials on demonstrated competence; (3) a demonstration of the value added by higher education; (4) the need to deliver workforce training; (5) the use of technology in instruction; (6) the needs of the community; and (7) the effectiveness of strategic alliances. The author addresses assessment in connection with four aspects of the community college mission: general education, career and occupational education, continuing education, and transfer to four-year institutions Also explored are processes for assessing institutional effectiveness, uses of assessment findings, and principles for successful assessment. Through analysis of assessment efforts in the community college setting, faculty and administrators at both two- and four-year institutions may find successful models for improving the assessment of student learning as well as curricula, instruction, and support services. (Contains 23 references.) (VWC)

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Assessment in Community Colleges:

Setting the Standard for Higher Education?

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Assessment in Community Colleges: Setting the Standard for Higher Education?

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Trudy W. Banta

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Introduction

Never before has higher education been subjected to such close scrutiny by public stakeholders. Almost daily we hear about the features that society needs and expects of higher education as we move into the 21st century. Some of these concepts raise hackles among many faculty because they go against the grain of higher education in this country that was established earlier in this century. A few of the features include:

1. ***Changing the focus from teaching to learning***—This change comes hard for faculty who have long believed that they knew best how their subjects should be taught and thus have put all the responsibility for learning on the shoulders of students. Now there is a strong suggestion that what students learn might actually be one criterion for judging teaching effectiveness.

2. ***Basing credentials on demonstrated competence***—This is a difficult concept for anyone who believes that a course grade is all we need to see in order to judge what a student knows.

3. ***Demonstrating increasing value-added for the cost students must pay for higher education***—This is particularly hard to accomplish because we don't have good instruments for measuring student gain in college and

many faculty like to say, "Don't force us to use so-called objective measures. We know competence when we see it."

4. ***Delivering workforce training***—This is hard to swallow for faculty who believe that higher education is about broadening intellectual horizons and **learning to learn** for a lifetime rather than learning time-limited job-related skills.

5. ***Using technology to deliver instruction***—This is a harsh reality for a generation of teachers who did not grow up using computers and thus often find themselves learning about technology from their students.

6. ***Serving community needs***—This is hard to accommodate for those faculty who want to devote as much time as possible to teaching and research.

7. ***Forming strategic alliances***—collaborating with peers inside and stakeholders outside the academy. This is hard to imagine for faculty whose allegiance is to their disciplines and who have become accustomed to working alone.

As many of us who are concerned about higher education have come to appreciate, community colleges are responsive, entrepreneurial, and innovative—all characteristics that society wants and needs of higher education. Faculty and staff at research universities—the institutions I know best—tend to be preoccupied with disciplinary loyalties and their own research programs, and thus are not inclined to be very responsive to community needs. Many research university faculty are not by nature entrepreneurial, or even collaborative, and are certainly not as likely to choose to spend time on innovations designed to improve teaching and student assessment as are faculty at teaching-oriented institutions. We in research universities think we know best what students need to learn and how they should be taught and so we don't listen very well to learners' needs. Very few of us are even willing to spend much time listening to colleagues who think

they have found more effective ways to teach. And some of us are not very interested in utilizing technology in teaching since we believe the lecture format is effective enough.

All of these characteristics of research-oriented faculty make it difficult indeed to establish assessment of student learning for purposes of improving instruction at a research university. Assessment would **seem** to be easier at a teaching-focused institution like a community college. As Peter Ewell (1992) has observed, the products of community college instruction appear to be more concrete and identifiable and thus more measurable than those of four-year programs because community colleges are providing a good deal of job training and instruction in basic skills. I like to argue this point with Jeff Seybert at Johnson County Community College. But Jeff maintains that assessment is at least as hard in community colleges, where students enroll for a variety of purposes and don't file through in an orderly way to pick up a degree in two years (Seybert, 1999). Specifically, Seybert points out that:

> Demonstrating institutional effectiveness presents a special set of problems for community colleges, which typically have a much broader instructional mission than do four-year colleges and universities. In addition to traditional freshman- and sophomore-level course work, community colleges provide career training, occupational retraining, remedial and developmental coursework, community and continuing education programs, contract training for business and industry, courses for special populations, and a variety of other educational offerings. Also, community college students...are often more diverse in terms of age, background, employment status, preparation, and educational objectives than their four-year college and university counterparts. Thus, some measures of institutional effectiveness commonly used by four-year colleges and universities, such as number

> of graduates or proportion of graduates to students admitted, are not usually applicable to community colleges (Seybert, 1999, pp. 249-250).

All right. I'm persuaded. Assessment is **also** difficult at community colleges. Nevertheless, against all odds, I have read about, heard about, and observed first-hand wonderful examples of successful assessment practice at community colleges from Florida to the state of Washington. And in some areas I believe assessment in community colleges **sets the standard** for assessment in higher education.

In the sections that follow I hope to accomplish four things. First I will outline some **approaches** to assessing four components of the community college mission that I find particularly worthy of note. Then, since assessment at community colleges is often conceived as a broad approach to evaluation of overall **institutional effectiveness,** my second section will contain some examples in this arena. Next I'll cite some illustrations of the **USES** of assessment findings to effect improvements. And finally, I'll draw some **generalizations from practice** about how community colleges have achieved success in assessment.

Approaches to Assessing Components of the Community College Mission

Jeff Seybert regularly contributes a column for the bi-monthly periodical *Assessment Update*. In his columns he has written about assessment of several aspects of the community college mission: providing general education, career and occupational education, and continuing education, and enabling students to transfer to four-year programs. I will address assessment in connection with each of these components.

General Education

Seybert (1994) believes strongly that teaching such concepts as numeracy, communication skills, ethics, problem solving, and cultural awareness should be taught across the curriculum, by all faculty. Thus setting goals for student learning and assessing achievement in these areas should be undertaken by multidisciplinary teams of faculty. These teams must determine where and when it is appropriate to assess generic knowledge and skills. Most likely this will be in courses, where learning is being assessed routinely for purposes of assigning grades. The multidisciplinary teams will simply look again at the students' work, across students and across courses, to see how well students in

general are mastering the knowledge and skills faculty have identified as critical.

At Sinclair Community College in Ohio, the multidisciplinary general education assessment committee began its work by asking, "What does it mean to be a generally educated person?" (Struhar, 1994) Using panels with college-wide representation, the multidisciplinary team at Sinclair specified 17 components of general education. Then they surveyed students in classes at all levels, from introductory to capstone courses, asking: "Considering the skills listed, what are your strengths? What are your weaknesses? What do you think is the most important aspect of general education? What comments would you like to make about general education?" In addition to this approach to student assessment, the committee is looking at the results of computer adaptive testing in mathematics and English and at the skills students exhibit in assignments and tests in capstone courses. Sinclair has appointed a college-wide panel of faculty, counselors, and administrators to receive the information from assessment, review it, and make recommendations for improvement. And Sinclair has organized a General Education Day for full-time and part-time faculty to share assessment approaches.

At J. Sargeant Reynolds Community College in Virginia, faculty were trained to serve as moderators for student focus groups designed to collect information about perceptions and opinions related to selected general education outcomes (Focus Groups Report...,1991). From the group discussions, faculty learned that students believed they had experienced growth in self-confidence, self-discipline, and motivation to succeed, and had developed broader perspectives. There was also especially strong evidence of the influence that personal contact and interest shown by instructors can have on student outcomes and persistence to degree completion.

At Snead State Community College in Alabama, faculty have taken a very different approach to assessment in general educa-

tion (Cooper, 1996). There all students bring with them an ACT score or take ACT's ASSET Placement Test. These scores are used in initial counseling and course placement. Then after students complete core academic subjects, they are tested again using ACT's Collegiate Assessment of Academic Proficiency (CAAP). For each student, decile rankings on the CAAP are compared with decile rankings on the ACT or ASSET tests. If a student's scores at both points in time are in the same decile, it may be assumed that he or she has maintained a level of performance in comparison with peers. If the CAAP performance places the student in a higher decile, presumably the Snead experience has added value.

Further analysis at Snead demonstrated that students with the lowest CAAP scores in writing had scored just above the cutoff levels on the ASSET Placement Test. When English faculty reviewed this information along with data about withdrawals and failures in the first college English class, they decided to raise the cutoff score for placement in that course and to require remedial work for those who fell below the new cutoff. Faculty in the math department decided to use ASSET scores to identify high-risk students and to offer them tutoring during their entry level math course.

Career and Occupational Education

In assessing outcomes related to the occupational skills training that community college students receive, we might ask five questions: How do students evaluate their college experiences? What learning outcomes have they achieved? How successful are students in obtaining appropriate employment? How do employers evaluate students' career training? Is the college meeting local or regional labor market and economic development needs? (Seybert, 1993) Let's look at some assessment methods in connection with each.

Students, former students, and graduates can simply be asked

how much progress they feel their classes and campus support services have helped them make in achieving specified career-related objectives. The questioning can take place in class or outside, via questionnaires, individual interviews or focus groups. Professor of English, Carl Waluconis (1991) at Seattle Central Community College, has made student self-assessment the principal feature of a special five-credit interdisciplinary course in which students write evaluations of their own learning in all the classes they are taking concurrently. Through learning-style inventories, journal writing, and seminars, students discuss their history as learners while relating their education to family, friends, and career ideas. Students reveal what they have learned, how their learning is connected to their own ideas and experiences, and the ways they are using or planning to use their learning. Students demonstrate metacognitive skills as they write mid-term and final essays about how they have learned these skills. And using teams of three faculty to read and re-read the course writing assignments, faculty can determine if students are making gains on certain knowledge and skill outcomes that they are trying to promote.

In assessing learning outcomes, one can use standardized or locally-developed tests based on cognitive outcomes and student perceptions of non-cognitive outcomes. Standardized tests, such as professional licensing or certification exams, usually provide national or regional norms against which one can compare students' scores. Commercial developers also must provide some evidence of reliability and validity. But faculty must look carefully at the content of standardized tests to see how closely it matches what they are teaching.

Locally-developed tests have the advantage of covering what faculty believe is important, but a trade-off can be the technical quality—reliability and validity—of the instrument. A compromise may be available in work like that of Daniel Vogler at Virginia Tech, who has developed a Curriculum Pedagogy Assessment (CPA) model with three software packages that

enable faculty to (1) develop a course syllabus with content goals and performance objectives and an estimate of the time a student will need to meet each goal, (2) build group and individual lesson plans to deliver the course objectives, and (3) devise an evaluation system to assess student achievement of the objectives (Herrmann, 1992). The Exam Building software offers an item pool with a variety of item types, including true-false, matching, multiple-choice, completion, short answer, essay, skill test or affective check list (that is, student perceptions of non-cognitive outcomes, as mentioned above)—from which a randomly-generated exam can be created. With a fourth piece of software, The Examiner, from Media Computer Enterprises, that creates and maintains a history of the exam questions, faculty can, over time, improve the reliability and validity of their own outcomes measures. The entire Minnesota Technical College System uses this CPA model.

Measures of student learning outcomes may be administered as stand-alone instruments or items may be embedded in assignments, exams, or final projects, that serve double duty—providing individual students with feedback about their success in mastering course objectives and later providing faculty with feedback about their success in assisting students to learn the knowledge and skills they deem important.

Another comprehensive assessment method that is growing in popularity is the portfolio. This is a collection of student work over time, perhaps in a course, but often over a career of college work. Again, faculty need to specify content and performance objectives for the portfolios and suggest how students select items for inclusion. Students usually are asked to write a reflective introduction that shows how the pieces of the portfolio fit together and why each was chosen. Faculty grading the portfolio must have specified criteria for judging the portfolio that all can agree upon; i.e., portfolio scoring should be as reliable as essay grading. At Johnson County Community College, for instance, faculty have developed holistic scoring rubrics for each of four

general education outcomes: mathematics, culture and ethics, modes of inquiry and problem solving, and communication, and are applying the rubrics in assessing portfolios of student work produced in courses throughout the curriculum (Seybert & O'Hara, 1997).

Various local and state tracking systems have been designed to assess student success in obtaining employment in which they use the skills they developed in college. Obviously, the more ground you can cover in a tracking system, the better. A national system would be ideal so that community colleges could track their graduates beyond state boundaries.

When it comes to gathering information from employers, Asheville-Buncombe Technical Community College in North Carolina has developed a comprehensive system that goes beyond the typical mailed survey or informal session with an advisory group (Morris, 1995). Every five years the college assembles CEOs of the major industries in its community for focus group discussions. The employers are asked to identify the knowledge and skills needed by entry-level employees as well as major skill deficiencies in the current work force that may suggest the need for retraining or continuing education. The focus groups supplement information about placement and satisfaction levels that the college gathers on a more frequent basis from surveys of its graduates and their employers. The college also relies on an advisory committee of practitioners for each curriculum area to suggest equipment updates and curriculum modifications.

An elaborate follow-up process that begins as soon as the focus groups are concluded invites further dialogue with the CEOs who participated. The activity culminates in a presentation of findings and recommendations for all the faculty, students, and staff by the focus group chairs. If a new training program is suggested, the idea is tested with the faculty and the advisory committee associated with the curriculum most likely to be affected. No final decisions are made about adding a program until all

focus group participants, as well as eight or ten other influential employers in the field being considered, have been interviewed and a comprehensive survey on the proposal has been administered to 100% of the group of employers in that sector of the local economy.

Finally, we come to the issue of demonstrating that a community college is addressing local or regional labor market and economic development needs. Carefully developed and administered surveys of various constituent groups can help to determine if a college is providing appropriate assistance in meeting employment and on-the-job training needs. Such surveys can also suggest how satisfied employers and area residents are with college opportunities in these areas. Academics and private consultants can usually be found to conduct economic impact studies that can furnish very important data about the tangible contribution that a community college makes to the economy of its local community and region.

Continuing Education

Delivering non-credit community service courses and programs and continuing education credit are important components of most community college missions (Seybert, 1995). These range from adult literacy and career planning and placement services to contract training programs to help employees in local companies extend their knowledge and skills. As always, the first step in assessment is to identify the intended outcomes for a given program. The next step may be a syllabus analysis like the ones Trudy Bers and colleagues at Oakton Community College in Illinois have conducted (Bers, 1996). Multiple trained faculty reviewers inspect each syllabus, looking for the extent to which it makes course outcomes evident to students and then provides assignments and assessments that assist students in attaining the identified outcomes. After looking at learning objectives and the process of instruction, we're ready to assess outcomes. Although somewhat difficult to obtain, one measure of the success of

continuing education programs is licensure renewal rates in fields like nursing, accounting, and real estate for individuals involved in required continuing education programs offered by a community college.

Sheer survival is a sure indicator of the effectiveness of non-credit and continuing education courses and programs. If no one shows up, the program is canceled. Monitoring student migrations from non-credit to credit programs is another relatively unobtrusive assessment method. A good educational experience may well encourage students to seek more of the same.

Questionnaires that ask enrolled students if a course met their goals, expectations, and needs are easy to design and administer, especially if pre-printed and scannable. A minute paper is easily administered and can quickly assess the most positive and negative features of a course as well as obtain student suggestions for improvements. Follow-up surveys for participants and their employers are also valuable. Once survey data are analyzed, focus groups may be used to obtain additional details about responses that raise unanswered questions. Surveys and focus groups can also provide needs assessment data to guide future programming.

Finally, continuing education programs may have the effect of promoting economic growth and development. Here an economic impact study may help make the case for continuing and non-credit community college offerings.

Transfer

Much has been written about the difficulty of determining transfer rates. The rate is usually defined as the proportion of those who enter a community college to go on to a higher level program for which the community college experience provided substantial preparation. But what number should go into the denominator of this fraction: all who enter, or just those who indicate their intention to transfer? Then what constitutes trans-

fer: being present on the first day of classes at a senior institution or completing a baccalaureate degree? And who provides the data on who transferred: the student or the four-year institution?

Craig Clagett (1995) at Prince George's Community College in Maryland has proposed an outcome typology for judging community college success. He suggests assigning students to one of the following categories:

1. Award and transfer - the percentage of any entering cohort who have earned a degree or certificate and transferred to a four-year institution.

2. Transfer/no award

3. Award/no transfer

4. Sophomore status in good standing - students who have not graduated, but have at least 30 credits and a grade point average of at least 2.0

5. Achievers - all those in the four categories above

6. Persisters - still a community college student but not an achiever

7. Achiever/persisters - summary of all of the above categories

8. Those who exit - degree-seeking students who did not graduate, transfer, or attain sophomore status in good standing.

Clagett combines categories 1, 2, and 3 above in a category labeled "success." Items 4 and 6 are combined to characterize students who show "progress." Students who are not successful are in the "exit" category. Students may be classified in these

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categories at the end of 3, 4, 5, and 6 years for internal purposes, with public reporting based on four-year rates. At Prince George's Community College, after four years, the success rate is 15 percent, the progress rate is 20 percent, and the exit figure is 65 percent.

Assessing Institutional Effectiveness

Having spent a good deal of time describing the variety of approaches to assessment that is available to community colleges, I would like to focus on just two examples of institutions that have developed comprehensive approaches to assessing overall effectiveness. The first of these is based on the work of Dan Walleri and Paul Kreider at Mt. Hood Community College. Assessment at Mt. Hood began in 1981, when a task force began to look at student progress and make recommendations for improvements designed to increase student success (Walleri & Stoering, 1997). Based on an analysis of transcripts of at-risk students, a mandatory placement and testing system for entry-level students was initiated, along with a tracking system to assess progress.

In the mid-1980s progress was made toward developing an integrated systems approach to institutional effectiveness. A program review process was initiated that focused on the relationship between student outcomes such as retention, job placement, and transfer success and institutional cost. Program review results were used in strategic planning and resource allocation decisions. And a faculty and staff development program was initiated to enable college personnel to serve students more effectively.

Over the past eight years, Midlands Technical College (MTC) in South Carolina has utilized the institutional effectiveness movement as a strategy for renewal (Hudgins, Kitchings, & Williams, 1996). For MTC, institutional effectiveness is a comprehensive planning and evaluation process that enables the college to demonstrate that its performance matches its purpose.

MTC's process of operationalizing institutional effectiveness consists of seven basic steps:

1. Articulate the mission.

2. Establish a planning mechanism.

3. Develop an evaluation system that tells if the college is doing what it says it does.

4. Establish critical areas of success

5. Establish priority standards upon which the college can judge its effectiveness in the identified critical areas.

6. Determine mechanisms for documenting that established standards have been met.

   - Objective data: enrollment reports, licensure test results, transfer grades, assessment of majors
   - Surveys: written, telephone, interview
   - Peer reviews

7. Utilize results of assessment for decision-making.

As a basic component of its strategic plan, MTC identified six areas critical to institutional success: (1) accessible, comprehensive programs of high quality; (2) student satisfaction and retention; (3) posteducation satisfaction and success; (4) economic

development and community involvement; (5) sound, effective resource management; and (6) dynamic organizational involvement and development.

Twenty indicators were designated within these core areas as evidence of the college's effectiveness in fulfilling its stated mission. Because MTC's prime commitment is to student success, the indicators of effectiveness reflect and measure this value.

Three specific examples of the twenty indicators of effectiveness are assessment of student knowledge and skills acquired in the major area of study; feedback from employers and receiving institutions on the success of employees or transfer students; and student evaluation of the college's role in the achievement of personal or career goals.

One of the most comprehensive strategies for assuring that students are exposed to a relevant, quality learning environment is the academic program review process for all associate degree programs. At Midlands the following data elements are included in academic program review: (1) achievement of program goals; (2) student grade point averages; (3) student mastery of capstone competences; (4) student mastery of a general education core; (5) program statistics, including enrollment, cost, retention rate, and number of graduates; (6) employment success of graduates; and (7) surveys of students, alumni, employers, and lay advisory committees.

In many areas, the DACUM (Developing A CUrriculuM) process is used as part of a program review, involving members of the business community in establishing a set of expectations and capstone competences for each academic area. Program faculty rely on DACUM input when determining course content, methods of information delivery, and mechanisms for assessing capstone competences.

Another important assessment strategy for measuring student progress is longitudinal tracking of mathematical and language

skills through a series of courses presented in a structured sequence. Sequenced course objectives allow the MTC tracking system to identify strengths and weaknesses in the curriculum.

Uses of Assessment Findings

Next we'll consider some examples of the kinds of changes and improvements that a number of community colleges have made in response to assessment findings. Speaking of the Midlands experience, tracking data, in concert with classroom research, have been used to modify and improve curricula. For instance, tracking of a cohort of a thousand students in the English department resulted in a course design that allowed students to learn writing through readings (Hudgins, Kitchings, & Williams, 1996). In the math department, tracking led to a faculty decision to define course objectives more clearly. The tracking of students' progress through course sequences resulted in decisions by faculty to increase expectations and make adjustments in the course content to enhance student success in meeting those expectations.

At Midlands, two of the most important aspects of institutional effectiveness are using the results of data collection to effect change and making constituencies aware of the college's commitment to accountability. Assessment measures are used to evaluate success in achieving the benchmark established for each indicator of effectiveness and to make continuous improve-

ments. And assessment results are communicated through an array of published reports, including an annual Institutional Effectiveness Report Card, which is a detailed update on progress toward annual objectives prepared for the Board of Trustees.

At Lane Community College in Oregon a student tracking system has been initiated that contains over 50 data elements from admissions, testing, and academic records (Walleri & Seybert, 1993). The system is used to identify students who are most at risk of dropping out. Using the information that poor reading and writing skills and uncertainty about selecting an academic major are powerful predictors of problems at Lane, faculty and staff have developed new advising procedures with intrusive counselor intervention if needed, and a college success course. The course has been so effective that students who complete it are much more likely to finish credit-bearing courses than those who do not.

At Seattle Central Community College transcript analysis revealed that half the students in intermediate algebra were getting grades of D or F (Walleri & Seybert, 1993). The faculty took action to place more emphasis on graphing, which seemed to be a most difficult area for students. They combined computer-assisted instruction using a graphing calculator with discussion of real-world applications of algebra in class. As a result, the percentage of students passing algebra went from 50% to 71%.

At Johnson County Community College in Kansas, student evaluations of instruction suggested that items on tests could be improved (Walleri & Seybert, 1993). Faculty workshops on item writing and test development were provided, and student evaluations of the quality of test items subsequently improved. Academic program reviews at Johnson County also revealed that some course material was outdated. Faculty were encouraged to renew their course material and now the results of reviews are more positive.

At the Community College of Denver, student tracking by program implemented in 1989 revealed that attrition was highest for students who were not associated with a program, developmental education students, and non-native English speakers (Walleri & Seybert, 1993). Student entry procedures were developed for every degree program, basic skills labs were undertaken in English and mathematics, grants were awarded for faculty projects designed to reinforce basic skills, and collaboration was strengthened between faculty and student services personnel.

The Community College Student Experiences Questionnaire (CCSEQ) has been used as an effective assessment tool by a number of community colleges. The CCSEQ looks at the quality of student effort in seven areas: course learning, library usage, interaction with faculty; student acquaintances; art, music, and theater; science activities; and vocational skills. These items measure both the breadth and depth of student involvement.

At Santa Barbara City College, CCSEQ findings helped identify areas in which involvement was strongly related to student success and areas in which the institution needed to do more to encourage involvement (Friedlander & MacDougall, 1996). In-service training and mini-grants were provided to encourage faculty and staff to increase student involvement in classroom activities and participation in on-campus and community-based extracurricular activities. Counseling services were redesigned to nudge students into taking more responsibility for obtaining needed information. Faculty were urged to sponsor departmental clubs and out-of-class activities, and additional space for such gatherings was established in the Campus Center. A coffee house was created to increase student-student and student-faculty interaction.

Santa Barbara City College faculty and staff have been rewarded for their diligence in responding to CCSEQ findings: subsequent administrations of the questionnaire have shown gains in student involvement, satisfaction, and progress toward desired college objectives.

In Tennessee, 5½% of each institution's state appropriation for instruction is based on reporting assessment findings and tracking improvements over time. At the State Technical Institute at Memphis, enrolled students expressed dissatisfaction with the availability of faculty outside class (Van Dyke, Rudolph & Bowyer, 1993). Since many State Tech students attend classes only at night, full-time faculty established more night office hours and began to staff learning labs themselves as opposed to asking non-faculty members to do this. Subsequent surveys have revealed that students are now more satisfied with the availability of faculty. At Dyersburg State Community College, surveys of dropouts revealed that students were leaving for financial reasons (Van Dyke, Rudolph, & Bowyer, 1993). The Dyersburg president decided to emphasize scholarship needs in the annual fund campaign. Subsequently more scholarships were awarded and the dropout rate decreased from 24 to 18 percent within two years. Low graduation rates at Dyersburg were addressed by installing a computerized degree monitoring system, initiating intrusive counseling to inform students of their progress, and including a review of the progress of advisees in annual faculty evaluations. Dyersburg has experienced a 60 percent increase in the number of graduates. And finally, Dyersburg has used employer focus groups and the CCSEQ and found that students' writing and interaction skills were in need of improvement. Writing assignments have been increased and interaction emphasized. Now employers' satisfaction as recorded in regularly-administered surveys has increased.

Principles for Successful Assessment

The faculty at Portland State University have developed guiding principles for assessment on that campus (Perrin, Dillon, Kinnick & Miller-Jones., n.d.). First, they suggest that faculty be given credit for those assessment activities that already exist and encouraged to take ownership of the assessment process. As they see it, the goal of assessment first and foremost is to improve student learning. Assessment, like all forms of scholarship, should be treated as a well-designed scholarly activity similar to designing a research program. Assessment programs will evolve over time with instruments changing as experience with them suggests they should be modified. And finally, data must be used to make improvements if assessment is to be worth the time and effort expended.

Sinclair Community College faculty have also developed a set of assessment principles (Denney, 1994), beginning with the assumption that the development of an effective, valid assessment program is a long-term dynamic process. Top priorities of the assessment program should be grounded in the core goals of the institution's mission. Assessment must involve a multimethod approach using the most reliable, valid methods and

instruments of assessment. Assessment of student learning and development is a process that is separate from faculty evaluation. The assessment program is most beneficial when used primarily for making internal decisions that seek to improve programs, instruction, and related services. Assessment results are not intended to be used punitively against students. Assessment program initiatives must include training and related support for faculty and staff who are responsible for assessment activities.

In *Assessment in Practice: Putting Principles to Work on College Campuses*, we based the first part of our narrative on the nine *Principles of Good Practice for Assessing Student Learning* developed by a group working under the auspices of the American Association for Higher Education (Banta, Lund, Black & Oblander, 1996). Three of the nine principles are closely related. These are stated: "The assessment of student learning begins with educational values (such as the improvement of teaching and learning);" "Assessment is most likely to lead to improvement when it is part of a larger set of conditions that promote change;" and "Assessment makes a difference when it begins with issues of use and sheds light on questions that people really care about."

A fourth principle states that assessment works best when the program it seeks to improve has clear, explicitly-stated purposes. Another emphasizes that assessment requires attention to outcomes but also and equally to the experiences that lead to those outcomes. We must pay attention to the processes of teaching and curriculum construction in order to increase and enhance student learning and then measure the outcomes. Only if we connect the processes and outcomes will we know what to improve when the results of assessment become available.

A sixth principle emphasizes that assessment works best when it is on-going, not episodic. We are going to be doing assessment from now on. It is not something we just do every five or ten years to satisfy some external requirement.

"Assessment fosters wider improvement when representatives from across the educational community are involved." This takes us back to the very beginning of this paper in which I emphasized that teams of faculty should be involved in determining the goals and objectives for student learning that form the bases for outcomes assessment.

The last AAHE assessment principle says that through assessment, educators meet responsibilities to students and to the public. Midlands Tech, for instance, has its annual report card in which it reports progress on performance indicators to its trustees and the public.

Using a report card format as a method of informing external constituents of accomplishments and progress toward goals is one of several assessment approaches in which I see community colleges leading the way in higher education. Other such approaches include student tracking systems, periodic and systematic employer surveys that provide one indication of a willingness to listen to employers and other community constituents, syllabus analysis, student self-assessment, defining student success in college, and comprehensive institutional effectiveness designs.

Two final points from the Sinclair principles for assessment provide an appropriate conclusion (Denney, 1994). First, a comprehensive assessment program is an effective and efficient way to provide data on which to build improvements in instruction. And second, assessment is never an end in itself, but only a means to an end. In education, the end is to benefit students, and assessment is but one of many possible bases for making decisions that affect our students' lives. These are wise words emanating from one of the assessment-active community colleges that may well be setting the standard in higher education assessment.

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